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Rejections under 35 U.S.C. §102

Claims 1-20 were rejected under 35 U.S.C. §102 as being anticipated by Yasrebi, U.S. Patent 5, 596,579.

Yasrebi describes, at column 4, lines 36-44 "... an interface mechanism for a switched communications gateway in a distributed computing network having means for issuing remote procedure calls across the distributed network, means for concurrently processing multiple remote procedure calls between at least one computer and the gateway across the distributed system, and scheduling means for sequentially processing remote procedure calls for related functions at the gateway..."

Claims 1-20 are patentably distinct over Yasrebi, which fails to describe or suggest every limitation of the claim as required under 35 U.S.C. §102.

Claim 1 as amended recites, among other elements, the steps of "... using a side channel to communicate flow information associated with the detected connection to a classifying router ... and incorporating this flow information into a differentiated services classification subsystem of the classifying router, the differentiated services classification subsystem using the flow information to assign a priority to the detected connection *by associating a quality of service level to the detected connection in accordance with the flow information* ..."

In particular, no mention or suggestion is found in Yaserbi that the router even performs differentiated services classification, or includes a differentiated services classification subsystem. The Examiner refers the Applicant to column 7, lines 25-54 in support of this limitation, and also Figure 3. However, the text identified by the Examiner merely describes

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"... a router 38a and 38b, connects the multiple workstations/processors ... into the main LAN 32... Network 37 connects workstations/processors 41a and 41b through a bridge 42 to the main LAN 32... LAN applications may represent users that access remote server applications, such as users issuing outgoing calls. LAN applications may also represent services that are used by remote users and/or applications that initiate incoming calls from the remote side of the switched network... A single gateway server ... includes multiple ports 44 for linking the incoming and outgoing calls between users and servers ... The RPC interface ... is of the generic type, requiring only systems support of synchronous RPCs ... and multi-threading programming interfaces ... According to the preferred embodiment of the invention, a high performance machine for effecting switched communications through a LAN gateway is achieved by augmenting the generic RPC mechanism with a communications interface ... that permits the applications on the LAN to generate at least 3 concurrent threads of control for 3 different functional categories..."

Applicant's fail to see how this portion of Yasrebi describes or suggests the limitations of the claims, including the step of "incorporating flow information" received from a side-channel, into a 'differentiated services subsystem...'

For at least the reason that Yasrebi fails to describe or suggest every limitation of the claim, claim 1 is patentably distinct over Yasrebi, and the rejection should be withdrawn. Claims 2-10 serve to add further patentable limitations to their parent independent claims, but are allowable for at least the reason as parent independent claim 1.

Applicant's claim 11 recites "...An apparatus for classifying a remote procedure call from a client system that initiates connections to a remote server using a client and underlying remote procedure call transport code, the apparatus comprising ... a module configured to detect when a connection carrying high value data for the remote procedure call is created ... a module configured to use a side channel to communicate flow information associated with the detected connection to a classifying router; and ... a module configured to incorporate the flow information into a *differentiated services classification subsystems of the classifying router by associating a quality of service level to the detected connection in accordance with the flow information...*"

Accordingly, as described with regard to claim 1, Yasrebi fails to describe the 'differentiated services classification subsystem' which associates 'a quality of service level to

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the dedicated connection' as recited in claim 11. Thus, claim 11 is patentably distinct over Yasrebi. Dependent claims 12-20 serve to add further patentable limitations to parent claim 11, but are allowable for at least the reasons put forth with regard to claim 11.

Applicants have made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Lindsay G. McGuinness, Applicants' Attorney at 978-264-6664 so that such issues may be resolved as expeditiously as possible.

For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,

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Date

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CLAIMS

1. (currently amended) A method for classifying a remote procedure call from a client system that initiates connections to a remote server using a client and underlying remote procedure call transport call, the method comprising:

detecting when a connection carrying high value data for the remote procedure call is created;

using a side channel to communicate flow information associated with the detected connection to a classifying router; and

incorporating ~~this~~ the flow information into ~~the~~ a differentiated services classification subsystem of the classifying router by associating a quality of service level to the detected connection in accordance with the flow information.

2. (original) The method of claim 1, wherein detecting comprises:

providing an API to calling applications;

detecting when applications call the API; and

executing a remote procedure routine based on a call by an application.

3. (original) The method of claim 2, wherein:

executing comprises accessing a remote procedure call API; and

the API provided to calling applications includes functionality duplicative of remote procedure call API functionality.

4. (original) The method of claim 2, wherein:

executing comprises accessing a remote procedure call API; and

the API provided to calling applications presents an interface duplicative of the remote procedure call API to calling applications.

5. (original) The method of claim 2, further comprising:

obtaining flow information from an application call to the API; and

providing the flow information to the classifying router via the side channel.

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6. (original) The method of claim 5, wherein the flow information includes a five-tuple including sender and receiver MAC and IP addresses, sender and receiver MAC and IP port numbers, and TCP protocol type for the connection.

7. (original) The method of claim 1, wherein the side channel is implemented as CGI script from the client to the router.

8. (original) The method of claim 1, wherein the flow information includes a five-tuple including sender and receiver MAC and IP addresses, sender and receiver MAC and IP port numbers, and TCP protocol type for the connection.

9. (original) The method of claim 1, wherein incorporating includes:

using the flow information to determine a differentiated services classification for the connection; and

marking traffic delivered to the connection by the classifying router based on the classification.

10. (original) The method claim 1, further comprising:

detecting the identify of the client making the remote procedure call, the flow information further containing this detected identify.

11. (currently amended) An apparatus for classifying a remote procedure call from a client system that initiates connections to a remote server using a client and underlying remote procedure call transport code, the apparatus comprising:

a module configured to detect when a connection carrying high value data for the remote procedure call is created;

a module configured to use a side channel to communicate flow information associated with the detected connection to a classifying router; and

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a module configured to incorporate ~~this~~ the flow information into ~~the~~ a differentiated services classification subsystems of the classifying router by associating a quality of service level to the detected connection in accordance with the flow information.

12. (original) The apparatus of claim 11, wherein the detecting module is further configured to:
provide an API to calling applications;
detect when applications call the API; and
execute a remote procedure routine based on a call by an application.

13. (original) The apparatus of claim 12, wherein:
the detecting module is further configured to access a remote procedure call API; and
the API provided to calling applications includes functionality duplicative of remote procedure call API functionality.

14. (original) The apparatus of claim 12, wherein:
the detecting module is further configured to access a remote procedure call API; and
the AAPI provided to calling applications presents an interface duplicative of the remote procedure call API to calling applications.

15. (original) The apparatus of claim 12, wherein the side channel module is further configured to:

obtain flow information from an application call to the API; and
provide the flow information to the classifying router via the side channel.

16. (original) The apparatus of claim 15, wherein the flow information includes a five-tuple including sender and receiver MAC and IP addresses, sender and receiver MAC and IP port numbers, and TCP protocol type for the connection.

17. (original) The apparatus of claim 11, wherein the side channel is implemented as a CGI script from the client to the router.

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18. (original) The apparatus of claim 11, wherein the flow information includes a five-tuple including sender and receiver MAC and IP addresses, sender and receiver MAC and IP port numbers, and TCP protocol type for the connection.

19. (original) The apparatus of claim 11, wherein the incorporating module is further configured to:

use the flow information to determine a differentiated services classification for the connection; and

mark traffic delivered to the connection by the classifying router based on the classification.

20. (original) The apparatus of claim 11, wherein the side channel module is further configured to detect the identity of the client making the remote procedure call, the flow information further containing this detected identity.
